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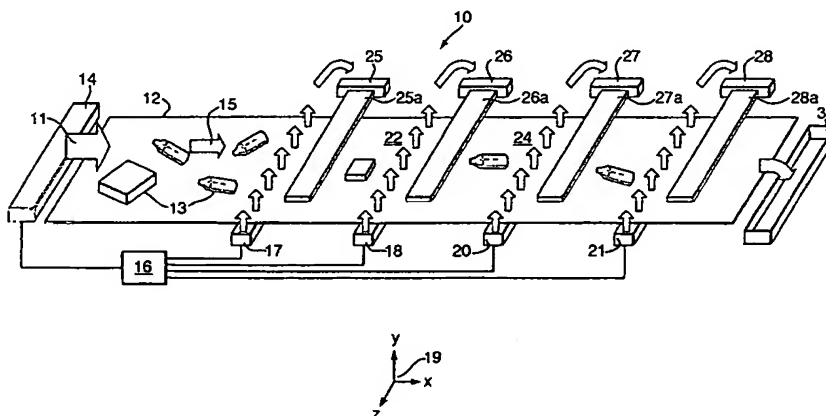
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(54) Title: SEPARATING DEVICE AND SORTING APPARATUS WITH TWO-DIMENSIONAL ARRAY OF NOZZLES AND METHOD OF SORTING OBJECTS



(57) Abstract: Sorting apparatus (10) comprising conveying means (12) for conveying input objects (13) input to the apparatus, extraction means (17, 18, 20, 21) for extracting from the conveying means input objects identified as belonging to a particular object-class and processing means (16) arranged to receive input data corresponding at least to the positions across the conveying means of said identified input objects and to output control signals corresponding to the input data to the extraction means to effect extraction of said identified input objects, wherein the extraction means comprises an array of nozzles extending in a direction (z) across the conveying means, each of which is independently operable under control of the processing means to produce an air jet in a generally upward direction (y), and is arranged to activate sub-groups of nozzles corresponding to, and in response to, said control signals, characterised in that the conveying means has a partially open surface (12) arranged to convey input objects over the array of nozzles, in that the array of nozzles is two-dimensional and also extends in a direction (x) substantially parallel to the direction of motion of the conveying means when the apparatus is in use; and in that the input data further corresponds to the outline shapes of said identified input objects.



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